THE

WEEKLY ENTERTAINER.

For Monday, August 2, 1819.

THE MENAI BRIDGE.

THE iron hanging bridge to be constructed over the Menai Strait, (which separates the Isle of Anglesea from Carnarvonshire) is to consist of one opening of 560 feet between the points of suspension, and 100 feet in height between the high water line and the lower side of the road-way; and the road-way being horizontal, this height is uninterrupted for the whole 560 feet, except where the natural rock, which forms the western abutment, now interposes. But, in addition to these 560 feet, there are to be four arches on the western, and three on the eastern, side of the main opening, each 50 feet span, that is, making in all 850 feet of opening. In regard to the navigation, it is far preferable to any bridge of an arched form, because the latter affords the full height of 100 feet only in the middle; whereas the former, as has just been observed, affords the same full height for the whole of the 500 feet, which will be a considerable advantage to vessels passing the Menai Strait, as it will allow them to stand closer to either shore while passing under the bridge. In regard to economy, this bridge, on the principle of suspension, has equally the advantage, the estimated expense not being more than 70,000*l.*; whereas the cheapest of the arched form, made of cast iron, would have cost nearly double that sum.

With respect to the facility of execution, it must be evident to any person the least conversant with mechanical operations, that the bridge, part of the large opening in the drawing, may be constructed nearly as readily as the centering only for a bridge of single arch of cast iron of the same span.

The road-way will consist of two carriage ways, each twelve feet in breadth, with a foot-path of four feet between them, so that the platform will be 30 feet in breadth. The whole is to be suspended from four lines of strong iron cables by perpendicular iron rods, placed five feet apart, and these rods will support the road-way framing. The suspending power is calculated at 2016 tons, and the weight to be suspended, exclusive of the cables, is 242 tons. The four sides of the road-ways will be made of framed iron-work, firmly bound together for seven feet in height, and there will be similar work, for five feet in depth, below the cables. The weight of the whole bridge between the points of suspension will be 489 tons.

It is calculated that the contraction and expansion of the iron cables may occasion a rise or fall to the extent of four or five inches; but the variations of the temperature of the atmosphere will not derange the bridge.

The abutments will consist of the masonry works, with the addition of a fourth arch on the Anglesea side; each of the two piers will be 60 feet by 42½ wide at high-water mark, having a foundation of rock. These piers, when connected with the whole of the remainder of the masonry, will form a mass constructed with blocks of hard lime-stone, of much greater weight than is necessary for supporting a bridge of this kind. Upon the summit of the two main piers will be erected a frame of cast iron, of a pyramidal form, for the purpose of raising the cables from which the bridge is to be suspended. As the cables will be carried from the top of the pyramids so as to form nearly similar angles on each side, the pressure will be almost perpendicular.

Mr. Telford proposes to have four lines of suspension in the breadth of the bridge, by which means the cables will be disposed in such a manner as to divide it (as before stated) into two carriage-ways of twelve feet each, with a foot-way of four feet in the centre. Along each line there will be four cables, making in the whole sixteen; these cables will pass over rollers fixed on the summit of the pyramids, and be fastened at their extremities to an iron frame, lying horizontally over the top of the small arches, and under a mass of masonry. From these cables the road-way will be suspended by vertical iron rods, connected at the lower extremities with wrought iron bars, both transversely and longitudinally, thus forming a frame on which timber will be laid for the road-way. The distance of five feet is kept between the rods, in order that the suspending power may be equally distributed throughout the whole length of the bridge. The suspending rods will pass between the cables, and depend upon each two of them, so that the general strength of the bridge could not materially be affected by taking one away. The cables and the flooring, as well as the suspending rods, will be constructed and united in such a manner, that each of the parts may be taken out and replaced separately; so that there can be no difficulty in repairing any part of the bridge, whenever required. A temporary wire-bridge will be made from one abutment to the other, in

order to carry over the cables, and arrange the several parts of the bridge, while building.

Mr. Barlow (in his calculation of the stress and strength of the projected iron hanging-bridge over the Menai Strait), begins by observing, that " one of the most important data, connected with this calculation, is the strength of direct cohesion of malleable iron. It appears, (says he) from the result of various experiments, performed by Mr. Telford and others, by Messrs Brunton and Co. and also by Captain Brown, at the latter of which I was present, that the medium ultimate strength of this metal is about 27 tons to the square inch section, and the strength, within certain limits, is proportional to the area. Mr. Brunton's machine appears to me to over-rate its own action; that of Captain Brown, to register less than its full power. According to the former course of experiments, the strength on a square inch section is 29¼ tons, while the latter gives only 25 tons. I assume the mean of these two as the medium strength; viz. 27 tons to the square inch. The bars on which these experiments were performed, varied from less than an inch to more than two inches in diameter. This datum being established, Mr. Telford was next desirous of ascertaining the strength of it when suspended, at its extremities, loaded with most weights in different parts of its length, the results of which experiments he supplied me with for my publication on the strength of wood and iron. They appear to me to have been made with great care and accuracy. I have computed theoretically what weight ought to have been expected to produce the fracture: and the agreement between the theory and the practice was very remarkable, in some cases, the difference was not one part out of one hundred of the actual weight.

" The length or distance between the piers of the Menai Bridge is proposed to be 500 feet, and the greatest deflection 30 feet, which will require the length of the cable or bar to be 505 feet, and the weight of 535 of a square inch rod will be about 1704 lbs. which will produce a strain on each point of suspension of 3,632 lbs. The strain necessary to produce a fracture on the same rod is 27 tons, or 60,480 lbs. Such a bar would, therefore, bear a load (including its own weight) of 28,372 lbs. to be uniformly distributed over it, before a fracture would take place. This weight, multiplied by the number of square inches in the section of all the bars, will give the extreme weight the bridge would support, or rather the least weight that would break it,

" I believe it is intended to have four cables, each of 15 inches area, or 60 inches section in the four; therefore 28,372 × 60= 17,023·200 lbs. or 760 tons, is the whole weight the bridge would be just able to support.

" If, therefore, the bridge be erected agreeably to the above plan, I am confident, as far as the strength of materials is concerned, no danger is to be apprehended. With regard to the strain and pressure on the top of the piers, I have made the following computations :—

The tension being assumed equal to 380 tons, the vertical pressure is found to be equal to 89 tons, (viz. 380 × sin. 13° 34′) as arising from the centre catenary; and I estimate that part of the cable which passes over the piers, and serves as a brace, will adjust itself to about an angle of 20° with the horizontal line passing over the pier. The vertical pressure arising from this brace is, therefore, about 230 × sin. 20°= 130 tons; and the whole vertical pressure on each pier will be 210 tons. I conceive (adds Mr. Barlow), that there will be no difficulty in finding materials to resist this pressure.

"The horizontal strain on the piers inwards is 38 × cos 13° 34′=369 tons, and outwards it is 880 × cos 20°=130 tons; there will, therefore, be a horizontal force acting inward on each pier equal to about 13 tons; this strain Mr. Telford proposes to counteract by the two pier braces, which will obviously be amply sufficient for the purpose. The weight of the masonry above the bed to which the cables are ultimately attached, ought to exceed as much as possible 130 tons; with less weight they would give way. In conclusion I beg to state, that I am not competent to judge of the practicability of the construction of this bridge; but, supposing it erected, I am convinced, from the above computation, that as far as strength is concerned, no danger whatever need be apprehended."

According to the plan of which Mr. Telford has had a specimen made, the cables are to be formed of a number of straight half inch bars, connected at different lengths. He has not yet entirely decided at what particular lengths they should be joined, or whether it would be preferable to unite a certain number of them by welding, and connect each of those lengths by joints. On the square sides of these bars will be laid segments of circles of a proper size for making the cables of a cylindrical form. The bars, as well as the segments, are each to be joined longitudinally to the whole of the required length, and secured by bucklings every five feet, and then enveloped in flannel, well saturated with composition of rosin, and bees-wax, to preserve them from the weather, and the whole are to be encircled with wire. But, by the following paragraph it will be seen that Mr. Telford considers himself fully at liberty to make such alteration, and improvements on this part of his plan, as he may deem expedient, on repeating his experiments, which he very judiciously proposes to extend during the progress of the work, so as to attain the most advantageous mode of applying this principle to the construction of bridges.

"The results from a bridge upon the principle of suspension (says Mr. Telford) can be satisfactorily ascertained by previous experiments; because, with a given length and curvature, it is known that malleable iron, of a good quality, can support a certain weight more than its own; and, therefore, when the weight to be supported is known, a safe rule is obtained to determine the quantity of iron required, and the goodness of each separate portion of iron to be employed can be effectually proved. The most advisable mode of com-

bination may always be determined by similar means; and although I have already, from my experiments, formed a plan which is practicable and substantial, yet I shall certainly, during the time the stone-work is constructing, claim the privilege of repeating and extending my experiments, in order to arrive at the most perfect mode of which this principle is susceptible."

The weight of each separate cable between the points of suspension is estimated at nine tons and three quarters, or 177 pounds per yard. The weight of a drove of oxen is calculated at about 300 tons, supposing them to amount to 200 head, all closely huddled together; and the estimate weight necessary to tear the cables asunder is upwards of 2000 tons, which is about four times the weight of the entire bridge. The passing of a mail coach over the bridge is not expected to produce any undulation, or sensible perpendicular vibration; nor is any lateral vibration apprehended from the most violent gale of wind, by reason of the proportion that the breadth of the bridge bears as a frame to its extreme length.

It has already been stated, that the experiments made by Mr. Telford were with a view to obtain the best data respecting the strength of the materials proposed by him to be employed in the construction of an iron hanging bridge across the river Mersey at Runcorn, to connect the counties of Cheshire and Lancashire. It may here suffice to mention that, in making those more particularly alluded to here, bars of iron were fixed at certain distances, with certain degrees of curvature, and weights hung upon them in the middle, and in different parts, till they broke. To separate a square bar of an inch and 5-16ths required the weight of 48 tons, and it required 43½ tons to break a half bar of an inch and 3-9ths in diameter. Some bars of an inch in diameter, of a foot long, stretched nearly three inches before they broke; and bars of three feet long, and one inch square, sometimes lengthened as much as eight inches before they gave way.

Iron has this peculiar property, that a certain weight extends the length of the bar. After standing some time, the bar remains of that length, and it requires an additional weight to give it an additional stretch; so that, although the actual dimensions of the sectional area of the bar becomes less, yet it bears a greater weight. Hence, should any one of the bars in this hanging-bridge, when first placed there, bear a greater weight than the one next to it, or any other bar, and be exposed to a stretch, it would soon accommodate itself to the length of the whole; and, in that state, be capable of breaking more weight than it did at first. Half-inch bars, of tolerably good iron will bear from six tons to six and a half; but they will elongate at not much more than half that stress. It is a curious fact, and deserving of the attention of philosophers, that frequently, at the moment of rupture, the bar requires such a degree of heat in the fractured part, as scarcely to allow a person to hold it grasped in his hand without a painful sensation of burning.

In fact, Mr. Telford has, for many years past, bestowed great

pains and considerable expense in making a vast number of experiments on the strength of iron suspended, as well vertically as horizontally, and with a variety of different degrees of curvature; finally, he has combined iron into the shape in which he has hitherto proposed to make the cables for the Menai Bridge, and tried experiments upon it in a model of 50 feet in length. The greater part of these experiments he performed, not by the intervention of a machine, but by absolute weight, tearing the iron to pieces in that manner; so that, instead of depending on theoretical calculations, he chiefly relies on the experiments made by actual weight, in which there can be no mistake, and on which his data are founded. Hence the confidence, which is justly placed in his plan, was thus honourably expressed by the Select Committee of the House of Commons at the conclusion of their Third Report:

"Your Committee feel great satisfaction in having it in their power to say, that Mr. Telford has completely convinced them of the practicability of his plan. The numerous instances which he has already given to the public of his talents as a civil engineer, fully prove that the House may place great confidence in his opinion. But when his opinion is supported by Mr. Rennie, and other engineers, the case of the practicability of this undertaking appears to be as completely made out as it is in the nature of things to allow of its being established.

"When it is remembered, that the first estimate prepared for Lord Colchester (when Chief Secretary for Ireland) for building a cast iron arched bridge across the Menai, amounted to 268,500*l*, your Committee are of opinion, that the public stand greatly indebted to the industry and talents of Mr. Telford, for having contrived a plan on so secure a principle, for executing this work for the sum of 70,000*l*."

The Menai Bridge may be completed in three years from the time of its commencement, and several hundred men are now employed in the preparatory operations. The foundation of the abutments on both shores is on solid rock. The stone, of which the masonry of the piers will be constructed, is procured in the north-east end of the Isle of Anglesea, from the estate of Lord Bulkeley, where the cliffs are nearly one hundred feet high. It is fine grey marble, perfectly solid, and in large masses, lying in a very convenient situation close to the sea shore, where it is loaded into vessels, and carried through Beaumaris Bay to that part of the Menai Strait where the bridge is to be erected.

BUCKINGHAM-HOUSE.

Continued from Page 583.

THE Duke of Buckingham's letter, in the midst of which our first extract from Mr. Pyne's history of the Royal Residences

left us, continues the account of the staircase in the following manner:

"The bas-reliefs and all the little squares above are episodical paintings of the same story; and the largeness of the whole had admitted of a sure remedy against any decay of the colors from saltpetre in the wall, by making another of oak laths four inches within it, and so primed over like a picture.

"From a wide landing place on the stairs head, a great double door opens into an apartment of the same dimensions with that below, only three feet higher; notwithstanding which it would appear too low, if the higher saloon had not been divided from it. The first room on this floor has within it a closet of original pictures, which yet are not so entertaining as the delightful prospect from the windows. Out of the second room a pair of great doors gives entrance into the saloon, which is thirty-five feet high, thirty-six broad, and forty-five along. In the midst of the roof, a round picture by Gentileschi, eighteen feet in diameter, represents the Muses playing in concert to Apollo, lying along on a cloud to hear them. The rest of the room is adorned with paintings relating to arts and sciences; and underneath, divers original pictures hang all in good lights by the help of an upper row of windows.

"To the gardens we go down from the house by seven steps, into a gravel walk that reaches across the garden, with a covered arbour at each end. Another, of thirty feet broad, leads from the front of the house, and lies between two groves of tall lime trees,* planted upon a carpet of grass; the outsides of these groves are bordered with tubs of bays and orange trees. At the end of this broad walk you go up to a terrace four hundred paces long, with a large semicircle in the middle, from whence are beheld the Queen's† two parks, and a great part of Surrey; then going down a few steps, you walk on the bank of a canal, six hundred yards long, and seventeen broad with two rows of limes on each side.

"On one side of this terrace, a wall, covered with roses and jessamines, is made low, to admit the view of a meadow full of cattle just beneath (no disagreeable object in the midst of a great city); and at each end is a descent into parterres, with fountains and water works.‡ From the biggest of these parterres we pass into a little square garden, that has a fountain in the middle, and two green houses on the sides, with a convenient bathing apartment, and near a flower garden. Below all this, a kitchen garden, filled all with the best sorts of fruits, has several walks in it fit for the coldest weather.

"Under the windows of this closet and green house, is a little wilderness, full of blackbirds and nightingales."

There was a former mansion upon this spot; for the duke, in

* These, as represented in an old etching, appear a noble mass of trees.

† Queen Anne.

‡ To supply the fountains on the grounds, a reservoir, over the kitchen in the wing, contained fifty tons of water, which was forced by an engine from the Thames.

moralizing upon man's discontent, says, "I am more often missing a pretty gallery in the old house I pulled down, than pleased with a saloon which I have built in its stead, although a thousand times better in all manner of respects." This was probably a house built in the Gothic style.

It is not easy to conceive, from the present state of the park, what were its rural beauties at this period, for the space before the Horse Guards and the south side alone were open to the public. The vistas between the trees, like those in Kensington gardens, were covered with grass, the track next the wall of St. James's being the only gravel road. There were many oak trees of large growth, and groups of fine elms, in the inclosure; although the mall was planted in its present style of formality in the reign of King Charles II.

THE ENTRANCE HALL.

"There are," continues Mr. Pyne, in his interesting description of the present palace, "two interesting prints of this noble entrance, including hall and stair case, the one from the bottom of the ascent, the other from the first landing, when the ascent is by a double flight of stone steps; the perspective and effect of these prints convey an exact idea of the place.

"The walls of the Hall are ornamented with sixteen pictures, some of which represent views of the magnificent buildings of Rome and Venice, and are to be numbered with the finest specimens of the splendid works of their Venetian painter Canaletti. Indeed, they were painted *con amore* for his first patron, an English gentleman, Mr. Smith, envoy from the court of St. James's at Venice."

The royal collection, it appears from subsequent parts of this work, is enriched with other pictures, collected by Mr. Smith, who was resident at Venice for more than half a century. He was the patron of men of talent; and the villa which he built on Terra Firma, a few miles from Venice, was the rendezvous of the cognoscenti and artists who visited that city. The king, we learn also from this work, purchased the library which Mr. Smith had collected; and the choice treasures of literature which it contained, formed the nucleus of his Majesty's library at Buckingham-House. There are three views of apartments belonging to this library, two of which were added by his Majesty. These, together with several other rooms, form one of the finest private libraries in Europe.

To be continued.

TEMPER.

"OF all the miseries in life, no one is equal to that of having an awkward servant," said Lady St. Florence, as I entered her boudoir. 'What is the matter?' said I. "Matter!" she repeated in an angry tone: "why, matter enough to make one mad: an infern—" (here she made a recover) "an illiterate, uncultivated

brute!—but I have dismissed him." 'Dismiss your anger and care with him,' said I; 'for they sit ill on that polished brow.' She tried to smile; but passion had frightened the graces away; her fair forehead looked cold and severe; her dark bewitching eyes flashed fire; the lily of her bosom was disfigured by a deep suffusion of crimson; her breast heaved tumultuously; and, in a word, all her fascinations dissappeared, and left an expression of wickedness which quite alarmed me.

'But what has poor John done?' inquired I. "Poor John!" exclaimed she: "why, da——" (another recover): "why, daily some brutal thing or other;—he is stupider than an owl, and fit to eat hay like a coach horse." 'Humanity, humanity, my dear lady,' quoth I: 'those words become not these lips, nor (pardon me for preaching) do they exactly suit the softness of your ladyship's sex, nor the rank which you hold in society.' "Nonsense," answered she, catching up a fan and rattling it betwixt her fingers until she cracked the sticks. Here her lap dog approached her, and she kicked him. "Troublesome beast!" cried she; "as great a plague as the footman." She was now scarlet all over,—face, neck, and arms: it was a dreadful metamorphosis.

At this instant the unfortunate delinquent appeared at the door, which he held half open in his hand. 'But, my lady,' he uttered in a plaintive and humble tone. "Leave the room, monster!" vociferated her ladyship (her face swollen, and her complexion empurpled with the increase of rage). He obeyed. She now flirted her broken fan, fidgeted on her seat, threw the wreck of this five guinea toy from her, and panted as if in agony.

'My dear Lady St. Florence,' said I, 'calm yourself. I may presume to offer advice, for I am old enough to be your father.' She recovered a little. 'You know, continued I, that I have had you an infant on my knee a hundred times, and that I valued your mother as though she were my sister.' "I know it," said she hastily, and only half displeased. 'And,' continued I, 'it grieves me to the heart to see you thus give up your reason, surrender your consequence, and abandon all self possession to the ungovernable empire of passion. Look,' concluded I, taking her gently by the hand, 'look in that mirror; how unlike that is to Lady St. Florence!' She tried to smile. 'How unlike little Sophy, the prettiest child I ever saw in my life!' "You're a good creature," said she, whilst her respiration became thick and unequal. I led her to the sofa, and she burst into tears.

Her tears relieved her; her bright eyes beamed again with their usual lustre, and shone "like April suns in showers;"—her troubled bosom beat with a gentler motion, like the wave whose angry agitation is appeased, and which resumes its usual course whilst its white foam sparkles in the solar beam, and dies away by degrees when all is calm. 'A la bonne heure,' said I. 'Now you are yourself again' (for the last transition was from purple to dead white, bring-

ing a sad resemblance with it of a haggard and exhausted fury, nearly spent with rage). "I'm too passionate," exclaimed she, with regret mingled with a little unextinguished vivacity: "I always was so, —you know it" 'True,' replied I; 'but time and self controul may get over that.' "I hope so," said she, putting her hand in mine, and exhibiting a lingering chrystal of the finest lustre in one corner of her eye.

'But let me intercede for poor John. He is young, a country lad, very humble, very contrite for what he has done: don't turn him away.' "Yes I will," replied she hastily, anger returning again. 'Gently, gently,' said I: 'do not flurry yourself. But what is this unpardonable fault which he has committed?' "A thousand," answered she with increasing vivacity; and again the rose, the lily, the diamond lustre of her eye, that sweet composure which is the finish to female beauty, smiles, dimples, and kindly expression,—all were flown! "First," (I dared not interrupt her, it would have made matters worse)— "First," (her dog returned and licked her hand)— 'That's a good lesson from the brute creation to man,' observed I smiling, and shaking my head: 'it is good returned for evil, kindness in exchange for injury, unaltered love in the midst of ill-usage.' She patted the dog on the head, and looked grave, half recovered, and proceeded.:

"First, he is as awkward as a bear." 'That's his misfortune,' said I.—"As stupid as an ass." 'The effect of fright, perhaps,' replied I.—"Knows nothing of his business." 'May improve in time.'— "Why," exclaimed she, (a little more of the fury returning) "you are quite the fellow's advocate." This was unanswerable; so I waved it by saying, 'Proceed, my dear Lady, and proceed calmly.' "In the first place, he was half an hour answering my bell, and, in my anger, I broke it." 'That's a pity.'—"He next brought me a letter in his vulgar fist, instead of on a salver, and I threw it at him." 'There you degraded yourself.'—"He picked it up, and took it down stairs. I called him back, bestowed on him the epithet of ideot, and bid him lay it on the table." 'I am sorry for it,' said I.—"He now trod on the dog: I ordered him to leave the room."

'Continue.' "He next denied me to the Colonel." 'That was a great mistake.' "And he let in all my duns." 'That's almost worse.' —"Then the disfiguring passion into which he put me!" 'Aye, that indeed!' replied I.—"Therefore am I not right to part with him?" 'Why, unless you can restrain your anger—yes: *but* (on which word I laid great stress) if Lady St. Florence could forgive him, could assume a mildness with him and all her servants, and could conquer herself, it would be the noblest conquest of her life. She would then be all perfection; and the promise made by her pleasing features would be fully kept by the heart (she looked all gentleness, and listened attentively): else does the latter'——"No, not the heart," exclaimed she, quite hurt ('twas what I wished)—— 'else does the temper of mind,' resumed I, 'belie the angelic touches

which partial Nature has bestowed on your features.' The compliment delighted her.

"I will never be in a passion again, my dear friend," exclaimed she; "and I will pardon and keep him." 'I feel personally obliged,' said I; 'and I shall be more than gratified if you will keep your promise just now made-' She repeated it; and I parted from her with a most parental sensation. But, alas! I am not always at her elbow; and, if I were, the storm may rise too high at some future period to be weathered by an aged pilot's interposition and guidance. Anger is like the lightning's flash; it is rapid and destructive: the wholesome shower often succeeds it too late to stop its fatal effects;—the flame is lit,—the conflagration has taken place,—the shower succeeds,—but 'tis to no purpose! Thus are injuries inflicted and impressions made under the influence of anger, which time and tears will not eradicate or wash away.

Lady St. Florence has lost many friends by the violence of her temper. She cannot keep a servant one month; her character is stamped as a fury—a virago; and her bad name has gone abroad, although her heart is excellent. The scrapes she gets into too are innumerable; the exposures many and vexatious. I recollect her fainting away at a ball, because she thought that the Colonel (who, by the bye, will not marry her on account of her temper) slighted her, and preferred another partner. At Lady Vantrum's card-party she worked herself into convulsions from the mortification of her heavy losses; and at the Argyle she so pouted and flounced at being contradicted by her aunt, that she broke the lace of her corset, and was forced to withdraw amid the sneers of an envious scrutinizing party.

Of all women's triumphs, the triumphs of the temper are the greatest. They are such as survive age, as give grace in sickness, and as bestow dignity under the sharpest adversity. They ensure felicity here, and point at immortality. A lovely face gains by the constant presence of good humour. A countenance of placidity and of equanimity, can repel the shafts of envy,—can turn the current of malevolence,—even conquer the esteem of an enemy, and fix for life the love and admiration of a friend or partner. I am convinced that if my female readers were acquainted with the subject of these lines; if they beheld her natural beauties put to flight by the approach of passion; if they had observed her, as I did on the occasion just stated, they would require no moral lecture, no serious homily, no friendly expostulation, in order to induce them to govern themselves. Their dearest interests would incline them to it; and experience would every day enrich the value of their victory.

THE HERMIT IN LONDON.

SINGING AND DANCING

A Very modern writer gives the following account of these favourite amusements:

"It is the opinion of those who have written on this subject, that as man has an articulate voice, it is natural to him to sing; notwithstanding that those who are accounted the best vocal performers now, sing so inarticulately,—and that the operation of the sound of the voice was sufficient originally to put in motion the arms, legs, and bodies of such as attended to the exertion of it, notwithstanding we see such numerous companies in our days sit for hours together, at a concert, without stirring a muscle:—according to the above authors, therefore, we must look for the origin of these two sciences in the commencement of our race. Ever since man was, says a very grave enquirer, song and dance have been in existence. There has been singing and dancing from the creation to our time; and they will continue, according to all appearances, till the destruction of our species.

"How profane soever some may affect to consider the amusement of dancing, as at present conducted, it was at first, and indeed during some thousand years, a religious ceremony.

"The most ancient dance of which we have any particular account, is that of the Jews, established by the Levetical law, to be exhibited at their solemn feasts.—After the passage of the Red Sea, 'Sumpsit Maria prophetissa, soror Aaron, tympanum in manu sua, egressaque, &c.' On which occasion there were two distinct bands, one of men and the other of women.

"The daughters of Shiloh were dancing in the vineyards when they were caught by the young men of the tribe of Benjamin, who were advised by the elders of Israel to take that opportunity of supplying themselves with wives. From which other people should take heed lest their daughters be caught in the same way.

"Not only is the dance of David often quoted, but it is the opinion of some commentators that every psalm had a separate and distinct dance belonging to it.—'In utroque Psalmo nomine chori intelligi posse cum certo instrumento, homines ad sonum ipsius tripudiantes.'

"In the temples of Jerusalem, Samaria, and Alexandria, a stage was erected in one part called the choir, for these exercises; the name of which had been preserved in our churches; and the custom too, till within a few centuries, The Cardinal Ximenes revived in his time the practice of Mosarabic masses in the cathedral at Toledo when the people danced both in the choir and the nave with the greatest decorum and devotion.—Le Pere Menetrier, a Jesuit, relates the same thing of some churches in France in 1682. So that the sect of dancing Methodists at Philadelphia, of which such alarming accounts have been given, seems rather to have abused than invented the custom.

"The Egyptians had their solemn dances as well as the Jews; the principal was their astronomical dance;—of which the sacrilegious dance round the golden calf was an imitation.

"From the Jews and Egyptians these sacred dances passed into Greece, where the astronomic dance was adapted to the theatre with

chorus, strophe, antistrophe, epode, &c. Plato and Lucian speak of it as a divine invention.

"The Greeks had likewise—the dance of the Curetes or Corybantes from the Cretans, and which was anterior to Jupiter, as it is supposed to have saved his life when an infant. The dance of Satyrs invented by Bacchus. The Memphitic dance invented by Pyrrhus. The rustic dance invented by Pan, and the ball dance invented, according to Philostratus, by Comus; according to Diodorus, by Terpsichore. The Hormus, a Lacedæmonian dance, which required to be taught at a very early age. The dance of innocence, which was performed by young women with still fewer adornments than now worn by our figuarantes. This was also a Spartan dance, and though so simple, was the cause of the double indignity offered to Helen, of the Trojan war, and all the subsequent calamities, &c.

"From Greece, these dances with different modifications found their way across the Adriatic. Rome adopted her manners, her arts, and her vices—thence they were dispersed over the rest of Europe."

Notice of the Victory of Vittoria.

From the Journal of a Soldier of the 71st or Glasgow Regiment.

NEXT morning we got up as usual. The first pipes played for parade; the second did not play at the usual time. We began to suspect all was not right. We remained thus until eleven o'clock; then received orders to fall in, and follow the line of march. During our march we fell to one side, to allow a brigade of guns to pass us at full speed. "Now," said my comrades, "we will have work to do before night." We crossed a river; and, as we passed through a village, we saw, on the other side of the road, the French camp, and their fires still burning just as they had left them. Not a shot had been fired at this time. We observed a large Spanish column moving along the heights, on our right. We halted, and drew up in column. Orders were given to brush out our locks, oil them, and examine our flints. We being in the rear, these were soon followed by orders to open out from the centre, to allow the 71st to advance. Forward we moved up the hill. The firing was now very heavy. Our rear had not engaged, before word came for the Doctor to assist Colonel Cadogan, who was wounded. Immediately we charged up the hill, the piper playing, "Hey Johnny Cope." The French had possession of the top, but we soon forced them back, and drew up in column on the height; sending out four companies to our left to skirmish. The remainder moved on to the opposite height. As we advanced, driving them before us, a French officer, a pretty fellow, was pricking and forcing his men to stand. They heeded him not—he was very harsh:—"Down with him!" cried one near me; and down he fell, pierced by more than one ball.

Scarce were we upon the height, when a heavy column, dressed in great coats, with white covers on their hats, exactly resembling the Spanish, gave us a volley, which put us to the right about at double quick time down the hill, the French close behind, through the whins. The four companies got the word, the French were on them. They likewise thought them Spaniards, until they got a volley that killed or wounded almost every one of them. We retired to the height covered by the 50th, who gave the pursuing column a volley, which checked their speed. We moved up the remains of our shattered regiment to the height. Being in great want of ammunition, we were again served with sixty rounds a man, and kept up our fire for some time, until the bugle sounded to cease firing.

We lay on the height for some time. Our drought was excessive; there was no water upon the height, save one small spring, which was rendered useless. One of our men, in the heat of the action, called out he would have a drink, let the world go as it would. He stooped to drink; a ball pierced his head; he fell with it in the well, which was discoloured by brains and blood. Thirsty as we were, we could not taste it.

At this time, the Major had the command, our second Colonel being wounded. There were not 300 of us on the height able to do duty, out of above 1000 who drew rations in the morning. The cries of the wounded were most heart rending.

MYSTERIOUS EPITAPH.

Mr. Editor,

PASSING lately through Christchurch, in Hampshire, while my horse was resting I strolled into the churchyard, and was somewhat struck with the following mysterious Epitaph :—

We were not slayne but rays'd.
Rays'd not to life.
But to be buried twice.
By men of strife.
What rest could th' living have.
When dead had none.
Agree amongst you.
Here we ten are one.
Hen. Rogers died April 17th—1641.
I.R.

No tradition is preserved respecting this strange inscription; but perhaps some of the ingenious contributors to the enigmatical pages of your miscellany will be able to discover its concealed meaning.

I remain, Sir,
Your obedient Servant.

J.

POETRY.

To an old Friend, on his wishing for a Renewal of his Youth.

AND would'st thou live over the days of thy youth,
The past days of anguish renew?
Again nourish visions of virtue and truth,
Again to pronounce them untrue?

Ah! think'st thou that age can feel misery alone?
There are aged hearts peaceful and blest—
Ah! think'st thou that youth and that pleasure are one?
There are youthful hearts strangers to rest.

There are those who have parted from friends they love best,
Ere the spring time of life has been o'er—
Who have lived to spurn many, whom since they carest,
And have wept o'er the graves of yet more.

It is true that the days of delusion are sweet,
When false friends as faithful we deem;
We can smile and look blest while unknown the deceit,
But, ah! who would wake from the dream?

Hope gladdens the heart in the breast whilst it glows,
Nor can youth its suggestions refuse;
But fleeting as bright is the joy it bestows,
Since so soon disappointment ensues.

And to youth, who look forward with hope and delight,
While yet they are strangers to care,
And who fancy each day as the past shall seem bright,
Disappointment is harder to bear.

But the storms of the heart shall affect *thee* no more,
Then say, is it just to complain?
It is true that the days of enchantment are o'er,
But they shall not mislead thee again.

This drear, guilty world, where we're destined to live,
Experience hath taught thee to know,
Thou expectest not more than 'tis able to give,
Not more than 'tis wont to bestow.

Look back on the days that are past—dost forget
The many sad tears thou hast shed?
Oh! recal them to mind, and no longer regret
That the days of keen suffering are fled.

For the life of some dear one, in youth's early bloom,
Thou'st perhaps offered prayers up in vain,
And would'st thou consign them again to the tomb,
And be doomed to weep o'er them again?

Reflect (and then youth will want power to allure)
On the pangs thou hast suffered but late,
When an act of unkindness was worse to endure
Than all the dark changes of fate.

But the season of danger and trial is o'er,
And calmly thou gazest around:
An act of unkindness is new now no more,
And no longer inflicts such a wound.

Would'st begin life again, when thou'rt hastening fast
To a bright world from misery free?
Thy wearisome pilgrimage soon shall be past—
Ah! would it were over with me.

HELEN.

PÆAN TO VICTORY.

From an Ode to the Duke of Wellington, written, as well as other Poems, by R. C. Dallas, youngest Son of Sir G. Dallas, Bart. between the Ages of eleven and thirteen Years.

HARK, through the air what accents roll!
What strains of triumph strike the soul!
Such the bright Thund'rer's stern control
Pealed, sounding from on high,
When that red arm, inflamed to ire,
Hurled Earth's dark Giants, wrapt in fire,
With ruin from the sky.

Lo, 'mid the crash, what golden blaze
Round what fair forms with splendour plays!
Fame, borne with Victory, blends her rays
In airy circles whirled:
Bids her loud clarion swell the note,
To echoes strain its brazen throat,
And rouze a wondering world.

Wake, Nations, wake! to wonder rise,
'Mid grateful millions' towering cries:
Let martial music pierce the skies—
Yet louder peal again—
Let golden strings now swell the key,
And big with heavenly symphony,
To valour lift the strain.

Hail the bold Chief who saw your yoke,
High reared in air his vengeful stroke,
Your iron fetters bravely broke,
And quelled your Tyrant's frown;
Tore from his brow, with matchless might,
An injured Monarch's trampled right,
And hurled his Eagles down.

'Twas his to burst your galling chain:
'Twas his to tear your bonds in twain:
'Twas his to dare th' embattled plain:
To conquer, or to fall:
'Twas in your cause his sword he drew;
'Twas in your cause to fight he flew:
He flew—and righted all.

His was the pride, alone, to save:
To spread before the sinking brave,
Whom rebel upstarts would enslave,
The shield that baffled Death:
Oh! hath not Heaven some special crown,
Some wreath eternal, for renown
Unsoiled by mortal breath?